

REMARKS

This Application has been carefully reviewed in light of the Official Action issued May 13, 2010. Claims 1-12 are pending in this Application. In order to advance prosecution of this Application, Claims 1, 3-5, 9, 10, and 12 have been amended. Applicant respectfully requests reconsideration and favorable action in this Application.

Claims 1-4 and 10-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,453,354 issued to Jiang, et al. in view of U.S. Publication No. 2002/0161855 published by Manczak, et al. Independent Claims 1 and 10 recite in general an ability to initiate an operation on the virtual metadata, lock the virtual metadata during execution of the operation, begin execution of the operation on the virtual metadata, determine whether a source metadata server maintaining the virtual metadata is to be relocated during execution of the operation wherein relocation of the source metadata server involves sending the virtual metadata from the source metadata server to a target metadata server, determine whether the virtual metadata is under hierarchical storage management, release a lock on the virtual metadata in response to relocation of the metadata server during execution of the operation on the virtual metadata and the virtual metadata being under hierarchical storage management. By contrast, the Jiang, et al. patent merely discloses that it can place locks on its files. However, the Jiang, et al. patent fails to disclose any capability to relocate a source metadata server let alone release a lock on virtual metadata in response to relocation of the source metadata server as required by the claimed invention. Moreover, the Examiner readily admits that the Jiang, et al. patent fails to disclose these features.

To offset the deficiencies of the Jiang, et al. patent, the Examiner cites the Manczak, et al. application for its metadata and data storage including hierarchical storage management. However, the Manczak, et al. application discloses the storage of metadata in a metadata server separate from its associated file data stored on a bitfile storage server. See Paragraph [0034] of the Manczak, et al. application. The Manczak, et al. application discloses that there can be redundant servers and file data can be stored in one or more locations and reflected as such in the associated metadata. The Manczak, et al. application only discloses that the storage server of the file data can be relocated. See Paragraph [0051] of the Manczak, et al. application. Contrary to the Examiner's assertion, the Manczak, et al. application fails to disclose any ability to relocate the metadata server. The Manczak, et al. application only discloses that the metadata server is updated when the storage server of the file data is relocated. See Paragraph [0052] of the Manczak, et al. application. Thus, the Manczak, et al. application only addresses data migration and not metadata migration. Moreover, the Manczak, et al. application fails to address how to handle a situation where an operation is being performed on metadata upon determining that the associated metadata server is to be relocated as provided in the claimed invention. Further, the system of the Manczak, et al. application teaches away from metadata migration. See Paragraph [0030] where it states ". . . while adding BSS nodes increases capacity of the system without the requirement of any explicit migration of file data or metadata." As a result, neither the Jiang, et al. patent nor the Manczak, et al. application disclose an ability to relocate a metadata server that involves sending virtual metadata from a source metadata server to a target

metadata server as required by the claimed invention. Support for the above recitation can be found in Paragraph [0075] of Applicant's specification. Therefore, Applicant respectfully submits that Claims 1-4 and 10-12 are not anticipated by the Jiang, et al. patent.

Claims 5-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,453,354 issued to Jiang, et al. in view of U.S. Publication No. 2002/0161855 published by Manczak, et al. and further in view of U.S. Patent No. 6,981,005 issued to Cabrera, et al. Independent Claim 5 recites ". . . locking virtual metadata maintained by the current metadata server during execution thereof by one of the computer system nodes, the virtual metadata being DMAPI enabled; beginning execution of the operation on the virtual metadata; initiating relocation of the current metadata server to the new metadata server during execution of the virtual metadata, wherein relocation involves sending the virtual metadata from the current metadata server to the new metadata server; releasing a lock on the virtual metadata in response to initiating relocation of the metadata server during execution of the virtual metadata; sending the virtual metadata from the current metadata server to the new metadata server." Thus, Independent Claim 5 includes similar features found in Independent Claims 1 and 10 shown above to be patentably distinct from the proposed Jiang, et al. - Manczak, et al. combination. Moreover, the Cabrera, et al. patent fails to disclose relocation of a metadata server that involves sending the virtual metadata from the current metadata server to the new metadata server or release of a lock on a virtual metadata in response to relocation of the current metadata server as required by the claimed invention. Therefore, Applicant respectfully submits that Claims 5-8 are

patentably distinct from the proposed Jiang, et al. - Manczak, et al. - Cabrera, et al. combination.

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,453,354 issued to Jiang, et al. in view of U.S. Publication No. 2002/0161855 published by Manczak, et al. Independent Claim 9 recites ". . . at least one metadata client node, coupled to said storage area network, the at least one metadata client node operable to: initiate an operation on the virtual metadata; lock the virtual metadata during execution of the operation; begin execution of the operation on the virtual metadata; determine whether a source metadata server maintaining the virtual metadata is to be relocated during execution of the operation, wherein relocation of the source metadata server involves sending the virtual metadata from the source metadata server to a target metadata server; determine whether the virtual metadata is under hierarchical storage management; release a lock on the virtual metadata in response to relocation of said source metadata server during execution of the operation on the virtual metadata and the virtual metadata being under hierarchical storage management; send the virtual metadata from said source metadata server to a target metadata server." from the current metadata server to the new metadata server." Thus, Independent Claim 9 includes similar features found in Independent Claims 1, 5, and 10 shown above to be patentably distinct from the proposed Jiang, et al. - Manczak, et al. combination. Therefore, Applicant respectfully submits that Claim 9 is patentably distinct from the proposed Jiang, et al. - Manczak, et al. combination.

This Response to Examiner's Final Action is necessary to address the characterization of the cited art and the interpretation of the claimed invention made by the Examiner

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to support the rejections to the claims. This Response to Examiner's Final Action could not have been made earlier as the Examiner has only now provided the current characterizations and interpretations in the Final Action.

CONCLUSION

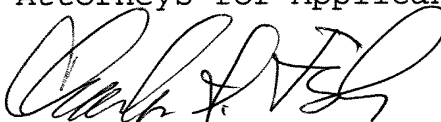
Applicant has now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims.

The Commissioner is hereby authorized to charge any fees or credit any overpayments associated with this Application to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.

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